



Creeping Line Search - MP

Objective: To practice Creeping Line search techniques.

Duration: 1.7 hours

SCENARIO

Th	e County Sheriff's Department has also stated that they have no unusual aircraft
rep	ports within the county.
A	SSIGNMENT
1.	Plan a route search for your assigned grid Plan three legs with 1NM track spacing.
2.	Plan a creeping line search for your assigned grid along the planned route. Plan 3NM legs and 1NM track spacing.

PRE-FLIGHT PLANNING

- 1. Discuss the purpose of the flight.
- 2. Plan to navigate to the assigned grid via pilotage.
- 3. Using the details below, complete the pre-flight planning using the appropriate sections of the flight guide.
- 4. Discuss the crew duties. Review individual responsibilities and who manages what equipment (for example, how the air band radios will be used and by whom).
- 5. Do all normal pre-flight activities (mentor calls for a weather briefing and prepares weight and balance, etc.)
- 6. Trainee prepares a CAPF-104 a. and b.

PRIOR TO DEPARTURE

- 1. Locate the following communications equipment and discuss their use:
 - a. Nav/Comms
 - b. DME
 - c. ADF
 - d. GPS
 - e. VHF-FM (CAP) radio
 - f. Audio panel
 - g. Intercom
 - h. Push-to-talk buttons and mike
- 2. Have the trainee give an aircraft passenger and safety briefing:
 - a. Demonstrate use of safety belts and harnesses
 - b. Identify emergency exits and egress procedures
- 3. The mission pilot candidate should set up the CAP radio, DF, and FAA radios. Enter the proper nav/comm. frequencies and the first destination in the GPS. The MP candidate should demonstrate setup of the audio panel. Assist the MP candidate as necessary. The MP candidate should verbalize what she/he is doing.





FLIGHT1. Enroute

- a. Fly at the briefed altitude.
- b. Discuss what to look for during a visual search. Whenever possible, have the trainee point out objects on the ground which resemble search visual clues, such as:
- c. Light colored or shiny objects
- d. Smoke and fire
- e. Blackened areas
- f. Local discoloration of foliage
- g. Fresh bare earth
- h. Breaks in cultivated field patterns
- i. Water and snow
- j. Tracks and signals
- k. Birds and animals

2. Route Search

a. Prior to reaching the start of the assigned route (but no farther than 2 miles) descend to the search altitude (1000 feet AGL). The trainee should report entering the search route. The route search should be performed with three legs with 1NM spacing at 90 to 100KIAS. The trainee should initiate all turns immediately after crossing the assigned grid boundary.

3. Creeping Line Search

a. After completing the three route search legs, the trainee should set up to begin the creeping line search. The creeping line search should be flown at 1000 feet AGL with 3NM legs and 1NM track spacing at 90 to 100KIAS.

4. Return to Base

- a. Discuss anticipated communications with tower, and let the trainee handle communications during the approach and landing. Have the trainee report out of the area and wheels down.
- b. Discuss anticipated taxi instructions, and let the trainee handle communications with ground control.
- c. The mission pilot candidate will make this landing under the supervision of the MAS flight instructor.

DEBRIEFING

- 1. Review the flight and answer any questions.
- 2. Complete the CAPF 104 and 104a.
- 3. Ensure that the required specialty qualification training record (SQTR) tasks below are completed and sign the trainee's SQTR.

REQUIRED SOTR TASKS

- 1. Complete Task P-2119 Demonstrate how to complete a CAP Aircraft Inspection
- 2. Complete Task O-2102 Demonstrate Planning and Flying a Route Search
 - a. Sign yourself and your aircraft into the mission.
 - b. Receive a sortie briefing, asking questions as necessary.
 - c. Plan a route search from Point A to B and back. Include:
 - i. Estimated time enroute and fuel requirements.





- ii. Position coordinates for the route (lat/long and VOR radials/cross-radials).
- iii. Altitude restrictions, obstacles and other hazards (e.g., MTRs and SUAs).
- d. Discuss observer/scanner assignments for all possible combinations.
- e. Fill out the flight plan and preliminary mission data on the CAPF 104.
- f. Preflight the aircraft and perform pilot safety and mission briefings.
- g. Demonstrate and discuss safety during each critical phase of the flight. In particular, demonstrate collision avoidance and enforce sterile cockpit rules.
- h. Demonstrate proper ATC communications.
- i. Setup the CAP FM radio and perform all required radio reports (may be simulated).
- i. Perform the route search. Demonstrate:
 - i. Proper use of navaids (GPS as primary; VOR as backup).
 - ii. Proper use of radios (ATC as required, and CAP FM radio reports).
 - iii. Entry at the proper point, stabilized at search altitude and speed.
 - iv. Accurate altitude and speed control in the search area.
 - v. Turns accomplished accurately using less than 30° bank angle.
 - vi. Accurate navigation and track spacing.
 - vii. Proper observer/scanner direction (may be simulated).
 - viii. Demonstrate proper attention to fuel management.
 - ix. Properly secure the aircraft at the end of the sortie (ready for next sortie).
 - x. Fill out the remainder of the CAPF 104 and debrief the sortie.
- 3. Complete Task O-2104 Demonstrate Planning and Flying a Creeping Line
 - a. Sign yourself and your aircraft into the mission.
 - b. Receive a sortie briefing, asking questions as necessary.
 - c. Plan a creeping line search. Include:
 - i. Estimated time enroute, time in the search area, and fuel requirements.
 - ii. Position coordinates for the entry and exit points (lat/long & VOR radials/cross-radials).
 - iii. Position coordinates for the legs (lat/long and VOR radials/cross-radials).
 - iv. Altitude restrictions, obstacles and other hazards (e.g., MTRs and SUAs).
 - v. Discuss observer/scanner assignments for all possible combinations.
 - d. Fill out the flight plan and preliminary mission data on the CAPF 104.
 - e. Preflight the aircraft and perform pilot safety and mission briefings.
 - f. Demonstrate and discuss safety during each critical phase of the flight. In particular, demonstrate collision avoidance and enforce sterile cockpit rules.
 - g. Demonstrate proper ATC communications.
 - h. Setup the CAP FM radio and perform all required radio reports (may be simulated).
 - i. Fly the creeping line search. Demonstrate:
 - i. Proper use of navaids (GPS as primary; VOR as backup).
 - ii. Proper use of radios (ATC as required, and CAP FM radio reports).
 - iii. Entry at the proper point, stabilized at search altitude and speed.
 - iv. Accurate altitude and speed control inside the search area.
 - v. Turns accomplished accurately using less than 30° bank angles.
 - vi. Accurate navigation and track spacing.
 - vii. Proper observer/scanner assignment (may be simulated).





- j. Demonstrate proper attention to fuel management.
- k. Properly secure the aircraft at the end of the sortie (ready for next sortie).
- 1. Fill out the remainder of the CAPF 104 and debrief the sortie.
- 4. Complete Task O-2004 Use a POD Table
 - a. Discuss how search planners determine the Maximum Area of Possibility and the Probability Area.
 - b. Using a POD table, discuss the advantages and disadvantages of various search altitudes and speeds over the three major types of terrain.
 - c. Discuss the importance of proper execution of search patterns.